

Title (en)
Wireless sensors in roll covers

Title (de)
Walzenhüllen mit drahtlosen Sensoren

Title (fr)
Couvertures de rouleaux avec des capteurs sans fil

Publication
EP 1653207 A2 20060503 (EN)

Application
EP 05016969 A 20050804

Priority
US 97794804 A 20041029

Abstract (en)
An industrial roll includes: a substantially cylindrical shell having an outer surface; a polymeric cover circumferentially overlying the shell outer surface; and a sensing system. The sensing system includes: a plurality of sensors embedded in the cover, each sensor configured to sense a data parameter; and a plurality of wireless transceivers, each transceiver connected to a respective sensor and embedded in the cover adjacent thereto. Each wireless transceiver is configured to transmit data signals from the respective sensor. Related methods and systems are also discussed.

IPC 8 full level
G01L 5/00 (2006.01); **G01L 5/04** (2006.01)

IPC 8 main group level
D21F (2006.01)

CPC (source: EP US)
G01K 1/024 (2013.01 - EP); **G01K 1/026** (2013.01 - EP); **G01L 5/0085** (2013.01 - EP US); **G01L 5/045** (2013.01 - EP US);
G01L 5/047 (2013.01 - EP US)

Cited by
WO2017191592A1; EP2267219A1; CN103635629A; DE102007045298A1; BE1023700B1; DE102005048367A1; DE102005048367B4; US7581456B2; US7392715B2; ITBO20090213A1; EP3009206A1; RU2665667C2; SE1951239A1; SE543446C2; US10378980B2; DE202008014477U1; DE102007000794A1; US9696226B2; US9008871B2; RU2685794C2; EP3517916A1; EP3954978A1; WO2008122693A1; WO2008110836A1; WO2008138690A1; WO2008096036A1; US8346501B2; US9863827B2; US9804044B2; US10533909B2; US8236141B2; US9650744B2; US10221525B2; US7963180B2; US10370795B2; US8475347B2; US9080287B2; US9121686B2; US10663940B2; WO2012166835A1; WO2016174588A1; US9816232B2; US10519599B2; US11614347B2; WO2014163775A1; WO2021086256A1; US10941521B2; US11629461B2; US9677225B2; US9797788B2; DE102017118301A1; WO2019029981A1; US10378150B2; US10641667B2; EP3452790B1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1653207 A2 20060503; EP 1653207 A3 20100203; EP 1653207 B1 20140625; AU 2005203628 A1 20060518; BR PI0503825 A 20060627; CA 2517043 A1 20060429; CA 2517043 C 20100601; CN 1782223 A 20060607; CN 1782223 B 20110608; JP 2006164244 A 20060622; NO 20055017 D0 20051027; NO 20055017 L 20060502; US 2006090574 A1 20060504; US 2008264184 A1 20081030; US 2009320612 A1 20091231; US 7392715 B2 20080701; US 7581456 B2 20090901; US 7963180 B2 20110621

DOCDB simple family (application)
EP 05016969 A 20050804; AU 2005203628 A 20050815; BR PI0503825 A 20050914; CA 2517043 A 20050825; CN 200510118821 A 20051028; JP 2005316042 A 20051031; NO 20055017 A 20051027; US 16455608 A 20080630; US 55188209 A 20090901; US 97794804 A 20041029